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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/859,576	06/15/2001	Shinya Kadono	HYAE:077A	4313
27890	7590	03/02/2006	EXAMINER	
STEPTOE & JOHNSON LLP 1330 CONNECTICUT AVENUE, N.W. WASHINGTON, DC 20036			CALLAHAN, PAUL E	
			ART UNIT	PAPER NUMBER
			2137	
DATE MAILED: 03/02/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/859,576

Applicant(s)

KADONO, SHINYA

Examiner

Paul Callahan

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_\_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8, 11-14, 35 and 36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2 and 4 is/are allowed.
- 6) ☒ Claim(s) 1, 3, 5-8, 11-14, 35, 36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Claims 1-8, 11-14, 35, and 36 were pending in this application at the time of the previous Office Action. Such claims remain pending in the instant application and have been examined.

### ***Response to Arguments***

2. Applicant's arguments filed 9-6-2005 have been fully considered but they are not persuasive.

The Applicant argues in traverse of the rejection of claims 7 and 8 under 35 USC 102(b) as anticipated by Tewfik 6,227,387 by asserting that Tewfik fails to teach varying the location of embedding of the (watermark) secret information. Yet the passage cited: col. 5 lines 18-35, and repeated by the applicant on page 13 of the response, teaches such a feature identically. In Tewfik, secret information may be embedded in lowpass frames consisting of localized image data that does not vary from scene to scene in the video frames, and embedded in temporally varying image data, i.e., the high pass frames where image data is varying from scene to scene.

The Applicant argues in traverse of the rejections of claims 1, 3, 5, 6, 11-14, 35, and 36 under 35 USC 103(a) as obvious over Tewfik and Rhoads 5,636,292 by asserting that Rhoads fails to teach embedding position information as a watermark signal. Yet a careful reading of the passage cited in Rhoads does indicate that the amplitude of the embedded composite signal does carry position information relevant to the embedded n-bit code word, and hence does read on a reasonably broad interpretation of the applicant's claim language.

The applicant asserts that there would be no motive to combine the teachings of Tewfik and Rhoads, as modern computers are able to process data fast enough to obviate any advantage derived from embedded position information. Yet although the absolute advantage in speed with which a watermark may be detected via the use of embedded position information may indeed be small, such would be additive in terms of detection when used with watermarking of video image data where such computations are repeated many times.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 7 and 8 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Tewfik et al. US 6,226,387.

As for claim 7, Tewfik teaches a method for embedding secret information in a prescribed position in an image signal, wherein the position where said secret information is to be embedded is varied frame-by-frame (col. 4 lines 18-35).

As for claim 8, Tewfik teaches a method for extracting secret information from an

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image signal in which said secret information is embedded by an information embedding method according to Claim 7, wherein: when said secret information is extracted from said image signal, the position from which said secret information is extracted is varied frame-by-frame (col. 4 lines 18-35, col. 7 lines 8-40).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3, 5, 6, 11-14, 35, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tewfik et al., US 6,226,387, in view of Rhoads, US 5,636,292.

As for claims 1, 5, and 13, Tewfik teaches a method for embedding secret information in a color image signal, comprising the steps embedding said secret information in a prescribed position in a first signal component of said color image signal; and embedding information, which specifies the position where the secret information is embedded, in a second signal component of said color image signal. (Abstract, col. 4 lines 18-35). However Tewfik does not explicitly teach that the watermark data embedded in the second signal component is position data related to the first watermark. Rhoads does teach this feature (col. 16 lines 15-30). Therefore it

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would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the teachings of Tewfik. It would have been desirable to do so as this would allow for more rapid detection of the watermark data.

As for claims 3, 6, and 14, Rhoads teaches a method for extracting secret information from a color image signal comprising the steps of: extracting said position information from said second signal component basis extracting said secret information component of said color image signal from said first signal (col. 16 lines 5-30).

As for claims 11 and 12, these claims represent the apparatus carrying out the method of claims 1 and 5 and are thereby rejected on the same basis as are those claims.

As for claims 35 and 36, these represent the computer program product, embodied in a memory medium, that when read out cause the apparatus of claims 11 and 12 to carry out the method of claims 1 and 5. Therefore they are rejected on the same basis as are those claims.

#### ***Allowable Subject Matter***

7. Claims 2 and 4 are allowed.

#### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul E. Callahan whose telephone number is (571) 272-3869. The examiner can normally be reached on M-F from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Emmanuel Moise, can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is: (571) 273-8300.

12-27-05

  
**EMMANUEL L. MOISE**  
**SUPERVISORY PATENT EXAMINER**